Summary

- In the temperate zone of the northern hemisphere, respiratory illness indicators and influenza activity continued to increase in most countries.
  - In North America, influenza activity further increased and although all seasonal influenza subtypes were co-circulating there was a high proportion of influenza B viruses.
  - In Europe, influenza activity continued to increase across the region and was reported at moderate levels in some countries of Northern Europe.
  - In Central Asia, influenza activity increased with influenza A and B viruses co-circulating.
  - In Northern Africa, influenza activity was low overall.
  - In Western Asia, influenza activity remained elevated overall and continued to increase in Iraq, Israel, Jordan, Turkey and Yemen.
  - In East Asia, ILI and influenza activity continued to increase overall.

- In the Caribbean and Central American countries, influenza activity was low overall, except for Cuba where increased detections of influenza B/Victoria lineage viruses were reported. In
tropical South American countries, increased influenza activity was reported from Ecuador and Colombia in recent weeks.

- In tropical Africa, influenza activity was elevated in some countries of Eastern and Middle Africa.
- In Southern Asia, influenza activity was low in most reporting countries, but remained elevated in the Islamic Republic of Iran, though decreased.
- In South East Asia, influenza activity was reported in the Lao People’s Democratic Republic and Malaysia.
- In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels.
- Worldwide, seasonal influenza A(H3N2) viruses accounted for the majority of detections.
- National Influenza Centres (NICs) and other national influenza laboratories from 110 countries, areas or territories reported data to FluNet for the time period from 9 December 2019 to 22 December 2019 (data as of 2020-01-03 08:00:07 UTC). The WHO GISRS laboratories tested more than 96 024 specimens during that time period. A total of 20 706 specimens were positive for influenza viruses, of which 14 225 (68.7%) were typed as influenza A and 6481 (31.3%) as influenza B. Of the sub-typed influenza A viruses, 3210 (28.9%) were influenza A(H1N1)pdm09 and 7890 (71.1%) were influenza A(H3N2). Of the characterized B viruses, 45 (1.5%) belonged to the B-Yamagata lineage and 2962 (98.5%) to the B-Victoria lineage.

For more detailed information, see the Influenza reports from WHO Regional Offices:

- WHO Region of the Americas (AMRO): www.paho.org/influenzareports
- WHO Eastern Mediterranean Region (EMRO): http://www.emro.who.int/health-topics/influenza/situation-update.html
- WHO European Region (EURO): www.flunewseurope.org/
- WHO Western Pacific Region (WPRO): www.wpro.who.int/emerging_diseases/Influenza/en/

Countries in the temperate zone of the northern hemisphere

- In the temperate zone of the northern hemisphere, respiratory illness indicators and influenza activity continued to increase overall.
- In the countries of North America, ILI and influenza activity further increased. All seasonal influenza subtypes co-circulated in Canada and the United States of America (USA), though the proportion of influenza B viruses was higher than in previous years for this period of the influenza season. Influenza B viruses accounted for half of the detections in Canada and influenza B/Victoria viruses were the predominant influenza type detected in the US, followed by influenza A(H1N1)pdm09. In Canada, percentage of visits for ILI and paediatric hospitalizations increased and followed the average trend of previous seasons (report by IMPACT network). For this season the majority of hospitalizations were associated with influenza A(H3N2). However, among sentinel paediatric hospitalizations with influenza,
approximately 55% were associated with influenza B. In the USA ILI activity raised sharply in the last weeks and reached the peak level of last influenza season. Hospitalisation rates were similar to those reported during recent seasons. The percentage of deaths attributed to pneumonia and influenza increased but remained below the epidemic threshold. Sixteen of the 22 influenza-associated paediatric deaths were associated with influenza B viruses.

- In Europe, influenza activity continued to increase across the region. In Northern Europe, influenza detections and syndromic surveillance indicators increased. Influenza A detections predominated in most reporting countries. Among the subtyped influenza A detections, influenza A(H3N2) predominated in Ireland and the United Kingdom of Great Britain and Northern Ireland (United Kingdom) while both influenza A(H1N1)pdm09 and A(H3N2) were reported in Finland and Iceland. In Ireland, ILI activity was reported at moderate levels; in the United Kingdom, ILI activity was moderate in Northern Ireland and Wales, low in England and below baseline in Scotland in week 50. In England, influenza hospitalizations and admissions to Intensive Care Units were at mid-levels. Respiratory syncytial virus activity increased in England and was reported as high in Ireland. In Eastern and Southwestern Europe, influenza detections increased but remained low with influenza A and B viruses reported. Syndromic surveillance indicators increased following seasonal trends but were generally low.

- In Central Asia, influenza activity increased with influenza A and B viruses co-circulating in all reporting countries except Uzbekistan where only influenza B viruses were reported.

- In Northern Africa, influenza activity was low overall, though Morocco and Tunisia reported influenza B virus detections in recent weeks.

- In Western Asia, influenza activity remained elevated overall. Influenza activity continued to increase in Iraq, Israel, Jordan, Turkey and Yemen, with detections of predominately influenza A(H1N1)pdm09 and a small proportion of B viruses (except in Yemen reporting predominantly influenza A(H1N1)pdm09). In Bahrain, influenza activity remained elevated with all seasonal influenza subtypes co-circulating. Detections of predominantly influenza B/Victoria lineage were reported as slightly increased in Lebanon. In Oman, Qatar and Saudi Arabia, influenza activity was reported as decreased with co-circulation of influenza A and B viruses.

- In East Asia, ILI and influenza activity continued to increase overall. In China, ILI activity continued to increase and was slightly earlier and higher than the levels of the three previous seasons; influenza activity also increased, with detections of predominately influenza A(H3N2), followed by a smaller proportion of influenza B/Victoria lineage viruses. In Mongolia, respiratory illness indicators were above the seasonal threshold with increased detections of influenza B viruses reported. In the Republic of Korea, ILI and influenza activity continued to increase with influenza A(H1N1)pdm09 and A(H3N2) viruses co-circulating. In Japan influenza activity was detected slightly earlier than in previous seasons, with a continued increase in the number of influenza cases per sentinel site.
Number of specimens positive for influenza by subtype in the North America

Data source: FluNet (www.who.int/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 03/01/2020

Number of specimens positive for influenza by subtype in Western Asia

Data source: FluNet (www.who.int/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 03/01/2020
Countries in the tropical zone

**Tropical countries of Central America, the Caribbean and South America**

- In the Caribbean and Central American countries, influenza activity was low in general, except for Cuba that continued to report detections of predominately influenza B/Victoria lineage viruses.

- In the tropical countries of South America, increased influenza activity was reported in recent weeks in Colombia and Ecuador with influenza A(H1N1)pdm09 most frequently detected.

**Tropical Africa**

- In Western Africa, reported influenza activity was generally low. Influenza virus detections of predominantly influenza A(H3N2) viruses were reported in Ghana and Guinea and influenza B/Victoria viruses were reported in Senegal.

- In Middle Africa, SARI and influenza activity increased in Democratic Republic of Congo with co-circulation of influenza A(H1N1)pdm09 and B/Victoria viruses.

- In Eastern Africa, influenza detections were low across most reporting countries. Increased influenza activity was reported in the United Republic of Tanzania with influenza A(H1N1)pdm09 virus most frequently detected. Influenza activity continued to be reported in Uganda with detections of all seasonal influenza subtypes. Increased ILI activity and influenza
B virus detections were reported in Mayotte (French territorial collectivity) as part of sentinel surveillance.

**Tropical Asia**

- In Southern Asia, influenza detections were low across reporting countries except for the Islamic Republic of Iran where influenza activity of predominantly influenza A(H1N1)pdm09 viruses continued to be reported though at lower levels from the peak of activity recorded in week 49 of 2019. Detections of all seasonal influenza subtypes increased slightly in Afghanistan.

- In South East Asia, influenza activity was reported in some countries. Influenza activity continued to be reported in the Lao People’s Democratic Republic with co-circulation of all seasonal influenza subtypes. Increased influenza activity was reported in Malaysia with influenza A(H1N1)pdm09 most frequently detected.

**Number of specimens positive for influenza by subtype in Central America and Caribbean**

![Graph showing number of specimens positive for influenza by subtype in Central America and Caribbean](image)

**Data source**: FluNet (www.who.int/flunet). Global Influenza Surveillance and Response System (GISRS)  
Data generated on 03/01/2020
Countries in the temperate zone of the southern hemisphere

- In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels.

Number of specimens positive for influenza by subtype in southern hemisphere

Data source: FluNet (www.who.int/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 03/01/2020

Sources of data
The Global Influenza Programme monitors influenza activity worldwide and publishes an update every two weeks. The updates are based on available epidemiological and virological data sources, including FluNet (reported by the WHO Global Influenza Surveillance and Response System) FluID (epidemiological data reported by national focal points) and influenza reports from WHO Regional Offices and Member States. Completeness can vary among updates due to availability and quality of data available at the time when the update is developed.

Seasonal influenza reviews:
A review of the 2018–2019 influenza season in the northern hemisphere, was published in August 2019 and can be found here: https://apps.who.int/iris/bitstream/handle/10665/326242/WER9432-en-fr.pdf
Epidemiological Influenza updates:
http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance
Epidemiological Influenza updates archives 2015:
http://www.who.int/influenza/surveillance_monitoring/updates/GIP_surveillance_2015_archives
Virological surveillance updates:
http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport
Virological surveillance updates archives:
http://www.who.int/influenza/gisrs_laboratory/updates/

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